

BUILDING 774

TRAINING

IMPLEMENTATION

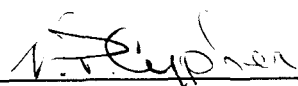
PLAN

Revision 2
September 26, 1997

CONCURRENCE BY THE FOLLOWING DISCIPLINES WILL BE DOCUMENTED IN THE
DOCUMENT HISTORY FILE:

Building 774 Instructor/Developer/Training Coordinator
Building 774 Team Lead
Compliance Training Manager

Approved by: N. P. Cypher
Water Management and
Treatment Manager


Signature

9-26-97
Date

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Appendix 1 Building 774 Core Training Matrix

Appendix 2 Building 774 Job-Specific Training Matrix

I. Purpose

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Building 774 is managed by Safe Sites of Colorado (SSOC), which is responsible for maintaining the building safety envelope and authorization basis (AB). The purpose of this Training Implementation Plan (TIP) is to implement a personnel training and qualification (T&Q) program that can be adjusted to the changing activities in RMRS water treatment operations in Building 774 which affect nuclear safety in the RMRS operating area. The TIP documents the job titles of personnel performing those activities, and identifies the T&Q required for individuals filling those job titles, in accordance with DOE Order 5480.20A (hereinafter, "the Order"). The TIP incorporates for completeness additional position titles for water treatment operation staff who have duties and conduct tasks which do not impact nuclear safety. Any major changes to B774 scope, or related job titles affected by the Order, are reviewed by the Team Lead for adjustments to this TIP. Assignments to job titles controlled by this TIP and individual qualification status are communicated to the SSOC responsible manager of Building 774 for inclusion in the SSOC List of Qualified Individuals (LOQI), as discussed further in Section V.

II. Scope

This TIP applies to RMRS personnel performing work that affects nuclear safety in the water treatment area in Building 774. This includes personnel involved in the receipt, interim storage and treatment of radioactive liquid waste at Building 774. Additional personnel who work in the area but do not perform work which affects nuclear safety are also included for completeness. RMRS and RMRS subcontractor personnel will meet the requirements of this document based on their job description and the tasks which they perform, where applicable. Personnel from other contractor companies are covered by this plan only to the extent of specific training requirements for entry into the liquid waste treatment area of B774. Where requirements are not specified in this plan, the RMRS Training Manual (RTM) and implementing work instructions will be the compliance documents.

III. Development History

A. Document Review - many documents were reviewed for training and qualification requirements. The following is a list of the training and

qualification requirements and the driving documents:

<u>REQUIREMENT</u>	<u>DRIVER</u>
1. Core Training Requirements	TUM, JTA
2. Building 774 Shift & Operations Orders	Conduct of Operations
3. Lessons Learned/Required Readings	Conduct of Operations
4. Building 774 Operational Safety Requirements	FSAR B774
5. Building Emergency Response Operations	Conduct of Operations
6. Building 774 Conduct of Operations Implementation Plan	Conduct of Operations
7. Building 774 Nuclear Material Safety Limits	Conduct of Operations
8. Building 774 Operational Safety Analysis	Conduct of Operations
9. Building 774 Internal Surveillance	Conduct of Operations
10. Monthly Nuclear Criticality Safety Assessments	Nuc Mat Manual
11. NMSL/CSOL Surveillances	FSAR B774

B. Job and Task Analysis - The analysis process identifies & defines the tasks involved for these operations, the type of training indicated, the knowledge requirements, safety hazards, and continuing training components, and standards that should be included in the training program(s).

C. Qualification Documents - The Job and Task Analyses identified the different levels of Qualification Documents needed as the appropriate level of training for the identified tasks. These were developed in accordance with the RTM.

D. Briefing Outlines - Briefings were identified as an appropriate training strategy for conducting training for facility updates, revisions to operations, lesson learned and safety related issues. There is no test associated with the briefings, however proper documentation of briefing outlines is conducted in accordance with TUM and the Site Conduct of Operations Manual.

IV. Qualification Requirements by Position

A. Team Lead - The B774 Team Lead is in the Responsible Manager role with respect to RMRS Water Management and Treatment Group in B774. The Team Lead's training requirements are listed as part of Appendices 1 and 2 which define Core and Job-Specific Training Requirements. This training is in addition to the education and job experience the Team Lead needed to acquire the position in accordance with Section IV.2.a of the Order.

- B. Process Specialist - Water Management and Treatment Process Specialists are Operators who perform the unit process operations and related liquid waste and residue (sludge) handling and storage tasks in and around Building 774. Appendices 1 and 2 list Core and Job-Specific Training Requirements applicable for Process Specialists in B774. The Process Specialists are trained and qualified to perform numerous tasks and operate several different parts of the treatment system and its ancillary equipment, and not all Process Specialists are needed to become qualified for each and every task. Thus, the full set of qualification standard packages (QSPs) listed in Appendix 2 are not considered mandatory requirements for all Process Specialists; rather, the QSPs which a given Process Specialist possesses correspond to the individual's particular work tasks and crew assignment. This training and qualification is in addition to the education the Process Specialists needed to acquire the position in accordance with Section IV.2.c of the Order.
- C. Operations Supervisor - The Water Management and Treatment Operations Supervisor is the immediate supervisor of the B774 Process Specialists pursuant to the Order. As such, the Operations Supervisor is trained and qualified to essentially the same requirements as the Process Specialists, but training required of supervisory level personnel is also included. Appendices 1 and 2 list Core and Job-Specific Training Requirements applicable for the Operations Supervisor. This training and qualification is in addition to the education and job experience the Operations Supervisor needed to acquire the position in accordance with Section IV.2.b of the Order. The qualification documents for the Operations Supervisor are listed on Appendix 2.
- D. Engineering Technologist - The Engineering Technologist is a Technical Support position with duties involving the surveillance and scheduling for repair of the liquid waste treatment process units and ancillary equipment in Building 774, and other technical and administrative duties as assigned by the Team Lead. Appendices 1 and 2 list Core and Job-Specific Training Requirements applicable for the Engineering Technologist in B774. This training and qualification is in addition to the education and job experience the Engineering Technologist needed to acquire the position in accordance with Section IV.2.f of the Order. The qualification documents for the Engineering Technologist are listed on Appendix 2.
- E. Compliance Specialist - The Compliance Specialist is a non-qualified

Technical Support position with responsibilities (among others) for surveillance, control and planning with regard to waste management and environmental regulations in B774. Appendices 1 and 2 list Core and Job-Specific Training Requirements applicable for the Compliance Specialist in B774. The Compliance Specialist position is not part of the nuclear facility operating organization, but is an integral part of the water treatment operating staff addressing other requirements and regulatory drivers.

- F. Maintenance Technologists - RMRS Maintenance Technologists conduct maintenance on the treatment system and ancillary equipment which relate to spill control capability in and around B774. These maintenance personnel do not service or survey other engineered safety features in B774, which are the responsibility of SSOC for both operation and maintenance. The RMRS Maintenance Specialists are assigned from another RMRS group for service in B774 and have training and qualification requirements defined in a set of QSPs by discipline and administered by their group. Appendices 1 and 2 list the building-specific training requirements applicable for the RMRS Maintenance Technologists in B774. Their training and qualification are in addition to the job experience the Maintenance Technologist needed to acquire the position in accordance with Section IV.2.e of the Order.
- G. Other Assigned Personnel - "Other assigned personnel" include Non-RMRS Contractor and their subcontractor personnel who work on the facility systems in B774 (e.g., SSOC Maintenance Specialists). These personnel have training and qualification requirements defined and administered by their operating organizations. Appendices 1 & 2 list building-specific training requirements for B774 which other assigned personnel must comply with for building entry. Qualifications for the positions assigned to work in B774 will be maintained by the other Contractors and their sub-contractors. All non-RMRS contractors and their subcontractors will maintain eligibility to work in B774 in accordance with Section V, List of Qualified Individuals.

V. List of Qualified Individuals (LOQI)

The RMRS B774 Team Lead will supply the names of personnel who serve in the positions listed in Section IV and are trained and qualified in accordance with Appendices 1 and 2 requirements to the SSOC Facility Manager for inclusion in the List of Qualified Individuals (LOQI) which the Facility Manager maintains. The RMRS information will be

maintained and updated monthly, pursuant to an RMRS Operations Directive (OPS-DIR-007) and Work Instruction (INSTR.004) on LOQI. RMRS personnel and RMRS subcontractors in the affected positions will be approved for inclusion on the LOQI based upon tracking and scheduling of training and qualification activities by the B774 Team Lead or designated training coordinator. Management of other RMRS groups which supply personnel to the B774 water management and treatment operation (e.g., maintenance personnel) provide LOQI information to the B774 Team Lead pursuant to an agreement between management of the other group and the Water Management and Treatment Group. Responsible management for Other Assigned Personnel (per Section IV.F) who perform tasks in the RMRS water treatment area provide LOQI information to the RMRS Team Lead in response to a written request that also identifies LOQI responsibilities and building entry training requirements (per Appendix 1). Management of the Other Assigned Personnel are responsible for tracking and maintaining their training and qualification and for ensuring that they meet the area entry requirements for the water treatment area. The RMRS Team Lead checks the RMRS LOQI information prior to authorizing any individual to perform activities that affect building and process safety in the water treatment area of Building 774.

VI. Continuing Training Program

- A. Re-training on core classes as specified in the RTM. The current system for tracking and scheduling Building 774 personnel is the Qualification Program Tracking (QPT) contained in the Training Scheduling and Records (TSR) system.
- B. Requalification, required by the Order for personnel in the Operator functional level, will be every 2 years (in accordance with the RTM) for the Process Specialists and their Operations Supervisor who initially qualify using the qualification packages listed on Appendix 2. The Process Specialists and their Supervisor also participate in the continuing training and periodic exam activities described below.
- C. Based upon a review of the operating organization tasks, JTAs and QSPs for Building 774, the continuing training program requirements for facility resident personnel (positions described in Section IV, A - E) are as follows:
 - Briefings shall be conducted each month, with additional briefings as necessary to disseminate information such as procedure changes,

facility modifications, and operating experiences, in a timely manner to support facility activities. These briefings are designed to correct actual or potential weaknesses and provide training on operating experiences, modifications, and procedure changes. Categories or topics of these briefings include, but are not limited to:

- Criticality Safety
- Conduct of Operations
- Health and Safety Practices
- Lesson Learned/Operating experiences
- Facility Changes, Procedures & Modifications
- Authorization Basis/Regulatory
- Radiation Control Safety
- RCRA & Waste Management & Environmental
- Emergency Preparedness
- Systems/Processes

- At a minimum quarterly job/task specific seminars shall be held. The seminars are used as a practical problem solving session for scenarios such as equipment off-normal conditions, or administrative process flows (e.g., immediate procedure changes, entry into LCO remedial actions) for activities performed at the facility. Sessions may be done by table-top or walkthrough and may be held as a team approach or by job positions, depending on the topic.
- Required reading shall be used when information is not presented using other continuing training elements. Required reading can be used to communicate procedure changes, equipment design changes, related industry & in-house operating experience information, and other information necessary to keep operating organization personnel aware of current facility activities and requirements.
- Demonstration of task proficiency for qualified tasks identified as requiring continuing training by the applicable JTA (i.e., tasks that are difficult, critical and performed infrequently) shall be performed at least once every two years by each person qualified on that task. All task qualifications specific to the facility and documented by the Training Implementation Plan (TIP) will require this action.
- Quarterly exams shall be administered to demonstrate continued job proficiency. Exam results are used to measure the effectiveness of

the continuing training program and to identify degraded proficiency so additional training can be initiated, if appropriate. Managers and technical staff personnel are not required to take the quarterly exams unless identified as qualified to perform the tasks related to the examination in the facility TIM.

- The following records shall be maintained for a minimum for two years:

- *Briefings/ lectures, seminars* - Training rosters and approved outline of the training

- *Required reading* - Completed read and sign rosters with a copy of the required reading content.

- *Quarterly Examinations* - Documentation of written exam questions and responses, or documentation of satisfactory recitation of oral exam responses, shall be maintained.

E. The Team Lead is responsible for maintaining the Required Reading program and ensuring the development and delivery of required briefings for the Building 774 Water Management and Treatment Group.

VII. Qualification Authority

The Qualification Authorities to sign Qualification Documents for Water Management and Treatment Group personnel in B774 are as listed:

A. Building 774 Team Lead

B. Water Management and Treatment Manager

VIII. References

These documents were used to identify, define, describe, and drive the required training and qualifications in this Training Implementation Plan:

A. FSAR for Building 774 (6/87)

B. Training Users Manual

- C. Health and Safety Practices Manual
- D. RMRS Training Manual (Draft)
- E. RMRS Operations Directive (OPS-DIR-007) and Work Instruction (INSTR.004) on LOQI

APPENDIX 1

BUILDING 774 CORE TRAINING MATRIX

	Team Lead	Operations Supervisor	Process Specialist	Engineering Technologist	Compliance Specialist	Maintenance Technologist*	Other Assigned Personnel*	Comments
CORE TRAINING**								
Computer Security User CBT**	X			X	X			
Confined Space			X					As appropriate
Conduct of Operations	X	X	X	X	X			Level as appropriate
DOT Awareness		X	X		X			
Fall Protection		X	X					As appropriate
GET and Refresher	X	X	X	X	X	X	X	
Glovebox Regular User			X					
Glovebox Supervisor		X						
Haz Communications Supervisor		X						
Haz Communications Checklist and CBT	X	X	X	X	X			
Haz Waste Operations (OSHA)-24 hour**	X	X	X	X	X			
Haz Waste Operations (OSHA)-40 hour**								
Haz Waste Operations (OSHA)-Refresher**	X	X	X	X	X			
Haz Waste Operations (OSHA)-Supervisor**		X						
Hoist		X	X					Training Personnel as appropriate
Bldg. Indoc	X	X	X	X	X	X	X	
Industrial Truck (Forklift and/or Pallet)		X	X					Forktruck and/or Pallet as appropriate
Integrated Work Control Program	X			X				As appropriate
Ladder Safety		X	X	X	X			As appropriate
Lockout/Tagout	X	X	X	X				As appropriate
Nuclear Criticality Safety	X	X	X	X	X	X	X	For unescorted access to RCA
Nuclear Criticality Safety Supervisor		X						
Nuclear Material Safeguards CBT**	X	X	X	X	X	X	X	
Occurrence Reporting	X							As appropriate
Overview of CCC/IWCP	X			X				As appropriate
Pressure Safety Awareness I		X	X					
Physical	X	X	X	X	X			
Radiation Worker Level I and Requal	X							Dosimetry Badge--Limited activities
Radiation Worker Level II and Requal		X	X	X	X	X	X	Dosimetry Badge--Unlimited activities
RCRA Custodian**	X	X	X	X	X			
RCRA/WG Annual Training**		X	X	X	X			For qualified WG and RCRA personnel
RCRA Tanks**	X	X	X	X	X			
Respirator Indoctrination CBT	X	X	X	X	X			Admin as appropriate
Responder-Operations and Refresher	X	X						
Respirator Fit	X	X	X	X	X			Admin as appropriate
Site Safety Envelope	X							
Security Refresher and OPSEC**	X	X	X	X	X			
TID		X	X					All WG qualified personnel
Waste Generator PA**		X	X	X	X			
WSRIC**	X	X	X	X	X			
* Personnel in these positions are qualified to perform tasks in their disciplines through T&Q programs administered by their group management.								
Only building entry requirements for unescorted access are listed here.								
** Training unrelated to nuclear safety is shown for completeness but is not required by the Order.								

R. B. B. B.
Bldg 774 Team Lead Approval


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APPENDIX 2

BUILDING 774 JOB-SPECIFIC TRAINING MATRIX

	Team Lead	Supervisor	Process Specialist	Compliance Specialist	Engineering Technologist	Maintenance Technologist*	Other Assigned Personnel*	COMMENTS
JOB-SPECIFIC TRAINING								
Required Readings:								
Operations Orders (as applicable)	X	X	X	X	X			
Lessons Learned	X	X	X	X	X			
Freeze Protection	X	X	X	X	X			
Logkeeping	X	X	X	X	X			
Required Readings	X	X	X	X	X			
Roles and Responsibilities	X	X	X	X	X			
Notification Process	X	X	X	X	X			
Access Control	X	X	X	X	X			
Radio/Pager Communications	X	X	X	X	X			
Organizational Roster	X	X	X	X	X			
Briefings:								
Authorization Basis	X	X	X	X	X			
Building Emergency Response Operations	X	X	X	X	X			
Conduct of Operations Matrix	X	X	X	X	X			
NMSLs	X	X	X	X	X			
Building 771 Crit Infraction	X	X	X	X	X			
Vehicle Control		X	X					
Crown Lift Truck (Use Operation)		X	X		X			
Delta Training For Misc. Aqueous Waste		X	X		X			
Proper Lifting and Use of Back belts		X	X		X			
Building 774 Operations Safety Analysis	X	X	X	X	X			
QUALIFICATIONS								
Waste Generator		X	X	X	X			Not required for Order compliance
RCRA Waste Management		X	X	X				Not required for Order compliance
RCRA Organic Air Inspections		X	X					Not required for Order compliance
Miscellaneous Aqueous Waste Handling & Solidification Process		X	X		X			Eng. Tech. as appropriate
Reagent Preparation Process Building 774		X	X		X			Eng. Tech. as appropriate
Modular Storage Tank Operation		X	X					
Monthly Criticality Assessment	X	X	X		X			Eng. Tech. as appropriate
NMSL/CSOL Surveillances		X	X		X			Eng. Tech. as appropriate
Glovebox Differential Pressure & Room 210 Zone II Surveillances		X	X		X			Eng. Tech. as appropriate
* Personnel in these positions are qualified to perform tasks in their disciplines through T&Q programs administered by their group management.								


Bldg 774 Team Lead Approval

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